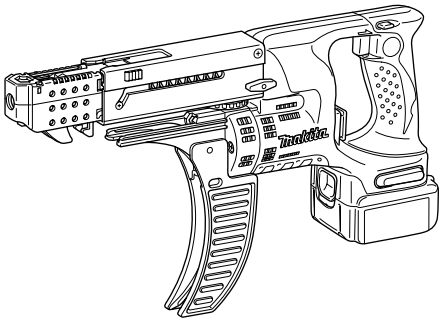
ENGLISH

INSTRUCTION MANUAL

Cordless Auto Feed Screwdriver

BFR540
BFR550
BFR750



008261

⚠WARNING:
For your personal safety, READ and UNDERSTAND before using.
SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE.

ENGLISH

SPECIFICATIONS

Model	BFR540	BFR550	BFR750
Screw strip	4 x 25 - 55 mm		4 x 45 - 75 mm
No load speed (min^{-1})	4,000		
Overall length	424 mm		464 mm
Net weight	2.1 kg	2.3 kg	2.3 kg
Rated voltage	D.C. 14.4 V	D.C. 18 V	D.C. 18 V
Standard battery cartridges	BL1430	BL1830	

• Due to our continuing programme of research and development, the specifications herein are subject to change without notice.

• Note: Specifications may differ from country to country.

END004-1

Symbols

The following show the symbols used for the equipment. Be sure that you understand their meaning before use.

· Read instruction manual.

· Only for EU countries
Do not dispose of electric equipment together with household waste material! In observance of European Directive 2002/96/EC on waste electric and electronic equipment and its implementation in accordance with national law, electric equipment that have reached the end of their life must be collected separately and returned to an environmentally compatible recycling facility.

ENE033-1

Intended use

The tool is intended for screw driving in wood, metal and plastic.

For Model BFR540

ENG101-1

For European countries only

Noise

The typical A-weighted noise level determined according to 60745-2-2:

Sound pressure level (L_{pA}) : 77 dB(A)
Uncertainty (K) : 3 dB(A)

The noise level under working may exceed 85 dB (A).

Wear ear protection.

ENG204-1

Vibration

The vibration total value (tri-axial vector sum) determined according to EN60745-2-2:

Work mode: screwdriving without impact
Vibration emission (a_h) : 2.5 m/s^2 or less

For Model BFR550

ENG101-1

For European countries only

Noise

The typical A-weighted noise level determined according to 60745-2-2:

Sound pressure level (L_{pA}) : 78 dB(A)
Uncertainty (K) : 3 dB(A)

The noise level under working may exceed 85 dB (A).

Wear ear protection.

ENG204-1

Vibration

The vibration total value (tri-axial vector sum) determined according to EN60745-2-2:

Work mode: screwdriving without impact
Vibration emission (a_h) : 2.5 m/s^2 or less

For Model BFR750

ENG101-1

For European countries only

Noise

The typical A-weighted noise level determined according to 60745-2-2:

Sound pressure level (L_{pA}) : 76 dB(A)
Uncertainty (K) : 3 dB(A)

The noise level under working may exceed 85 dB (A).

Wear ear protection.

ENG204-1

Vibration

The vibration total value (tri-axial vector sum) determined according to EN60745-2-2:

Work mode: screwdriving without impact
Vibration emission (a_h) : 2.5 m/s^2 or less

ENH102-6

EC-DECLARATION OF CONFORMITY

Model; BFR540, BFR550, BFR750

We declare under our sole responsibility that this product is in compliance with the following standards of standardized documents;

EN60745, EN55014 in accordance with Council Directives, 2004/108/EC, 98/37/EC.

CE2006

000230

Tomoyasu Kato
Director

Responsible Manufacturer:
Makita Corporation
3-11-8, Sumiyoshi-cho, Anjo, Aichi, JAPAN
Authorized Representative in Europe:
Makita International Europe Ltd.
Michigan Drive, Tongwell, Milton Keynes, Bucks MK15 8JD, ENGLAND

GEA002-3

GENERAL SAFETY RULES

WARNING! Read all instructions. Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury. The term "power tool" in all of the warnings listed below refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.

SAVE THESE INSTRUCTIONS.

Work area safety

1. **Keep work area clean and well lit.** Cluttered and dark areas invite accidents.
2. **Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust.** Power tools create sparks which may ignite the dust or fumes.
3. **Keep children and bystanders away while operating a power tool.** Distractions can cause you to lose control.

Electrical Safety

4. **Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools.** Unmodified plugs and matching outlets will reduce risk of electric shock.
5. **Avoid body contact with earthed or grounded surfaces such as pipes, radiators, ranges and refrigerators.** There is an increased risk of electric shock if your body is earthed or grounded.
6. **Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.
7. **Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts.** Damaged or entangled cords increase the risk of electric shock.
8. **When operating a power tool outdoors, use an extension cord suitable for outdoor use.** Use of a cord suitable for outdoor use reduces the risk of electric shock.

Personal Safety

9. **Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication.** A moment of inattention while operating power tools may result in serious personal injury.
10. **Use safety equipment. Always wear eye protection.** Safety equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
11. **Avoid accidental starting. Ensure the switch is in the off-position before plugging in.** Carrying power tools with your finger on the switch or plugging in power tools that have the switch on invites accidents.
12. **Remove any adjusting key or wrench before turning the power tool on.** A wrench or a key left attached to a rotating part of the power tool may result in personal injury.
13. **Do not overreach. Keep proper footing and balance at all times.** This enables better control of the power tool in unexpected situations.
14. **Dress properly. Do not wear loose clothing or jewellery. Keep your hair, clothing, and gloves away from moving parts.** Loose clothes, jewellery or long hair can be caught in moving parts.
15. **If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used.** Use of these devices can reduce dust-related hazards.

Power tool use and care

16. **Do not force the power tool. Use the correct power tool for your application.** The correct power tool will do the job better and safer at the rate for which it was designed.
17. **Do not use the power tool if the switch does not turn it on and off.** Any power tool that cannot be controlled with the switch is dangerous and must be repaired.
18. **Disconnect the plug from the power source and/or the battery pack from the power tool before making any adjustments, changing accessories, or storing power tools.** Such preventive safety measures reduce the risk of starting the power tool accidentally.
19. **Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool.** Power tools are dangerous in the hands of untrained users.

20. **Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tools operation. If damaged, have the power tool repaired before use.** Many accidents are caused by poorly maintained power tools.
21. **Keep cutting tools sharp and clean.** Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
22. **Use the power tool, accessories and tool bits etc. in accordance with these instructions and in the manner intended for the particular type of power tool, taking into account the working conditions and the work to be performed.** Use of the power tool for operations different from those intended could result in a hazardous situation.

Battery tool use and care

23. **Ensure the switch is in the off position before inserting battery pack.** Inserting the battery pack into power tools that have the switch on invites accidents.
24. **Recharge only with the charger specified by the manufacturer.** A charger that is suitable for one type of battery pack may create a risk of fire when used with another battery pack.
25. **Use power tools only with specifically designated battery packs.** Use of any other battery packs may create a risk of injury and fire.
26. **When battery pack is not in use, keep it away from other metal objects like paper clips, coins, keys, nails, screws, or other small metal objects that can make a connection from one terminal to another.** Shorting the battery terminals together may cause burns or a fire.
27. **Under abusive conditions, liquid may be ejected from the battery, avoid contact. If contact accidentally occurs, flush with water. If liquid contacts eyes, additionally seek medical help.** Liquid ejected from the battery may cause irritation or burns.

SERVICE

28. **Have your power tool serviced by a qualified repair person using only identical replacement parts.** This will ensure that the safety of the power tool is maintained.
29. **Follow instruction for lubricating and changing accessories.**
30. **Keep handles dry, clean and free from oil and grease.**

GEB017-1

SPECIFIC SAFETY RULES

DO NOT let comfort or familiarity with product (gained from repeated use) replace strict adherence to screwdriver safety rules. If you use this power tool unsafely or incorrectly, you can suffer serious personal injury.

1. **Hold power tools by insulated gripping surfaces when performing an operation where the cutting tool may contact hidden wiring or its own cord.** Contact with a "live" wire will make exposed metal parts of the tool "live" and shock the operator.
2. **Always be sure you have a firm footing.**
   Be sure no one is below when using the tool in high locations.
3. **Hold the tool firmly.**
4. **Keep hands away from rotating parts.**
5. **Do not touch the bit or the workpiece immediately after operation; they may be extremely hot and could burn your skin.**

SAVE THESE INSTRUCTIONS.

⚠WARNING:

MISUSE or failure to follow the safety rules stated in this instruction manual may cause serious personal injury.

ENC007-2

IMPORTANT SAFETY INSTRUCTIONS

FOR BATTERY CARTRIDGE

1. **Before using battery cartridge, read all instructions and cautionary markings on (1) battery charger, (2) battery, and (3) product using battery.**
2. **Do not disassemble battery cartridge.**
3. **If operating time has become excessively shorter, stop operating immediately. It may result in a risk of overheating, possible burns and even an explosion.**
4. **If electrolyte gets into your eyes, rinse them out with clear water and seek medical attention right away. It may result in loss of your eyesight.**
5. **Do not short the battery cartridge:**
   (1) **Do not touch the terminals with any conductive material.**
   (2) **Avoid storing battery cartridge in a container with other metal objects such as nails, coins, etc.**
   (3) **Do not expose battery cartridge to water or rain.**
   A battery short can cause a large current flow, overheating, possible burns and

even a breakdown.

6. **Do not store the tool and battery cartridge in locations where the temperature may reach or exceed 50 ˚ C (122 ˚ F).**
7. **Do not incinerate the battery cartridge even if it is severely damaged or is completely worn out. The battery cartridge can explode in a fire.**
8. **Be careful not to drop or strike battery.**

SAVE THESE INSTRUCTIONS.

Tips for maintaining maximum battery life

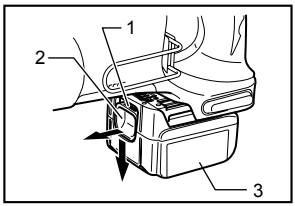
1. **Charge the battery cartridge before completely discharged.**
   Always stop tool operation and charge the battery cartridge when you notice less tool power.
2. **Never recharge a fully charged battery cartridge.**
   Overcharging shortens the battery service life.
3. **Charge the battery cartridge with room temperature at 10 ˚ C - 40 ˚ C (50 ˚ F - 104 ˚ F). Let a hot battery cartridge cool down before charging it.**

FUNCTIONAL DESCRIPTION

⚠CAUTION:

- Always be sure that the tool is switched off and the battery cartridge is removed before adjusting or checking function on the tool.

Installing or removing battery cartridge

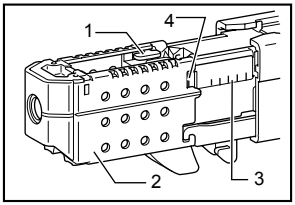


1. Red part
2. Button
3. Battery cartridge

006801

- Always switch off the tool before insertion or removal of the battery cartridge.
- To remove the battery cartridge, withdraw it from the tool while sliding the button on the front of the cartridge.
- To insert the battery cartridge, align the tongue on the battery cartridge with the groove in the housing and slip it into place. Always insert it all the way until it locks in place with a little click. If you can see the red part on the upper side of the button, it is not locked completely. Insert it fully until the red part cannot be seen. If not, it may accidentally fall out of the tool, causing injury to you or someone around you.
- Do not use force when inserting the battery cartridge. If the cartridge does not slide in easily, it is not being inserted correctly.

Setting for desired screw length



1. Lever
2. Stopper base
3. Label on feeder box
4. Fenestella

008123

There are 7 positive-lock screw length settings. To obtain the desired setting, pull out the stopper base while depressing the lever until you see the number of the desired screw length (indicated on the label on feeder box) appear to rest in the fenestella of stopper base. See the table below for the relation between the number indicated on the label on feeder box and the respective screw length.

For Models BFR540, BFR550

Number indicated on the label	Screw length
25	25 mm
30	30 mm
35	35 mm
40	40 mm
45	45 mm
50	50 mm
55	55 mm

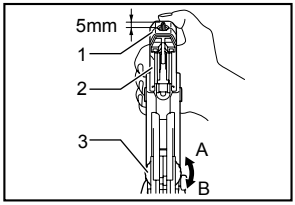
008238

For Model BFR750

Number indicated on the label	Screw length
45	45 mm
50	50 mm
55	55 mm
60	60 mm
65	65 mm
70	70 mm
75	75 mm

008241

Adjusting the driving depth

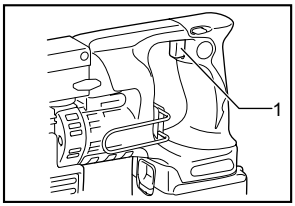


1. Stopper base
2. Casing
3. Adjusting knob

008124

Depress the stopper base as far as it will go. While keeping it in this position, turn the adjusting knob until the bit tip projects approx. 5 mm from the stopper base. Drive a trial screw. If the screw head projects above the surface of the workpiece, turn the adjusting knob in the "A" direction; if the screw head is counter-sunk, turn the adjusting knob in the "B" direction.

Switch action



1. Switch trigger

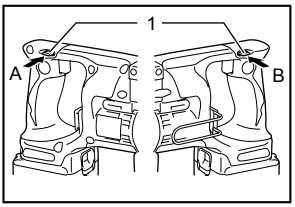
008282

⚠CAUTION:

- Before inserting the battery cartridge into the tool, always check to see that the switch trigger actuates properly and returns to the "OFF" position when released.

To start the tool, simply pull the switch trigger. Release the switch trigger to stop.

Reversing switch action



1. Reversing switch lever

008283

This tool has a reversing switch to change the direction of rotation. Depress the reversing switch lever from the A side for clockwise rotation or from the B side for counterclockwise rotation.

When the reversing switch lever is in the neutral position, the switch trigger cannot be pulled.

⚠CAUTION:

- Always check the direction of rotation before operation.
- Use the reversing switch only after the tool comes to a complete stop. Changing the direction of rotation before the tool stops may damage the tool.
- When not operating the tool, always set the reversing switch lever to the neutral position.

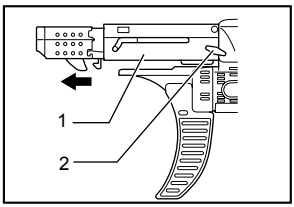
ASSEMBLY

⚠CAUTION:

- Always be sure that the tool is switched off and the battery cartridge is removed before carrying out any work on the tool.

Installing or removing the bit

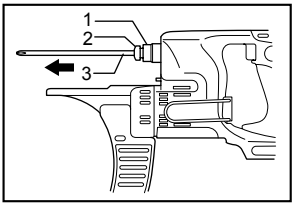
Loosen the thumb screws which secure the casing. Pull out the casing in the direction of the arrow.



1. Casing
2. Thumb screw

008285

Press the dust cover toward the plane bearing and pull out the bit. If the dust cover cannot be moved as far as the plane bearing, try it again after turning the bit slightly. To install the bit, insert it into the socket while turning it slightly. After installing, always make sure that the bit is securely held in place by trying to pull it out.

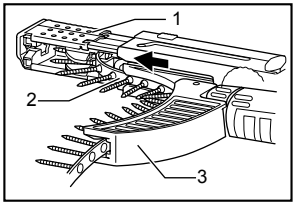


1. Plane bearing
2. Dust cover
3. Bit

008286

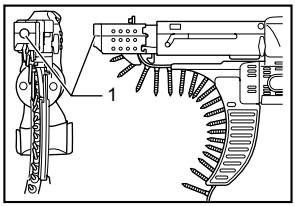
Installing screw strip

Insert the screw strip through the screw guide. Then insert it through the feeder box until the first screw reaches the position next to the driving position.



1. Feeder box
2. Screw strip
3. Screw guide

008290

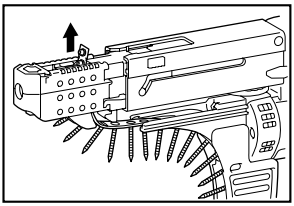


1. Driving position

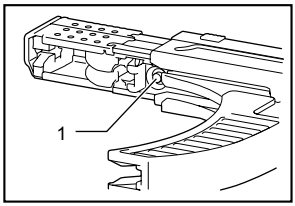
008288

Removing screw strip

To remove the screw strip, just pull it out in the direction of the arrow. If you depress the reverse button, you can pull out the screw strip in the reverse direction of the arrow.



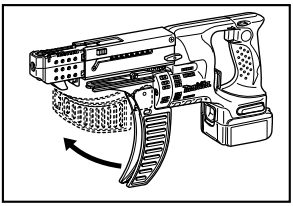
008281



1. Reverse button

008128

Folding screw guide

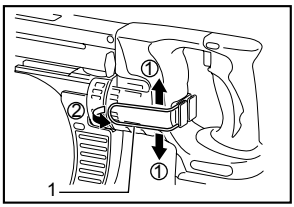


008289

Screw guide is foldable. Folding the screw guide allows space used for storage to be minimal.

Carry hook

The carry hook is convenient for temporarily hooking the tool. It can be installed on either side of the tool.
When removing the carry hook, widen it by pressing its right ends ON BOTH SIDES in the directions of arrow (1) and raise it in the direction of the arrow (2).

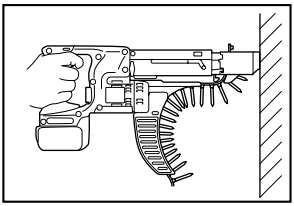


1. Hook

008262

OPERATION

Driving operation



008263

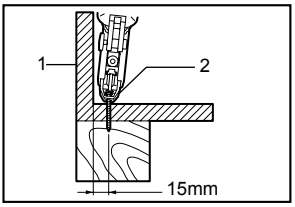
Switch on the tool by pulling the switch trigger. Hold the tool squarely and firmly up against the driving surface. A screw will be automatically carried to the driving position and fastened.

⚠CAUTION:

- Always check the bit carefully for wear before driving operations. Replace a worn bit or poor fastening may result.

- Always hold the tool squarely against the driving surface. Holding it at an angle may damage the screw heads and cause wear on the bit. This may also lead to poor fastening.
- Always keep the tool firmly against the driving surface until the driving is over. Failure to do so may cause insufficient fastening of screws.
- Be careful not to drive a screw onto another screw already fastened.
- Do not operate the tool without screws. It will damage the driving surface.
- Do not apply oil or grease on the sliding surface of the feeder box.

Driving in corner



1. Wall
2. Stopper base

006812

This tool can be used to drive at a position 15 mm away from the wall as shown in the figure.

⚠CAUTION:

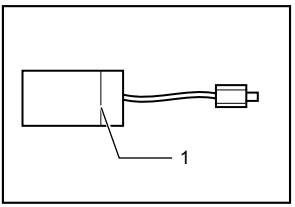
- Driving at a position closer than 15 mm to the wall or driving with the stopper base in contact with the wall may damage the screw heads and cause wear on the bit. This may also lead to poor fastening of screws and malfunction of the tool.

MAINTENANCE

⚠CAUTION:

- Always be sure that the tool is switched off and the battery cartridge is removed before attempting to perform inspection or maintenance.

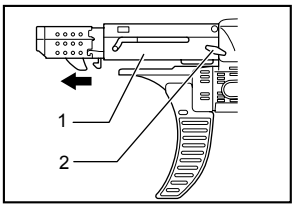
Replacing carbon brushes



1. Limit mark

006258

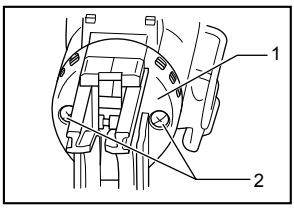
Replace when they wear down to the limit mark. Keep the carbon brushes clean and free to slip in the holders. Both carbon brushes should be replaced at the same time. Use only identical carbon brushes.
Loosen the thumb screws which secure the casing. Pull out the casing in the direction of the arrow.



1. Casing
2. Thumb screw

008285

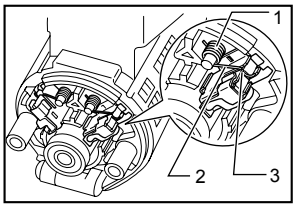
Use a screwdriver to remove two screws then remove the front cover.



1. Front cover
2. Screws

008287

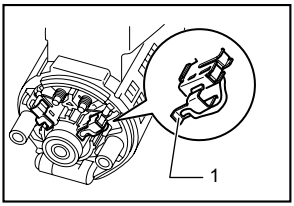
Raise the arm part of the spring and then place it in the recessed part of the housing with a slotted bit screwdriver of slender shaft or the like.



1. Spring
2. Arm
3. Recessed part

006816

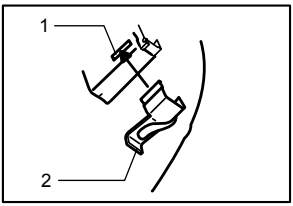
Use pliers to remove the carbon brush caps of the carbon brushes. Take out the worn carbon brushes, insert the new ones and replace the carbon brush caps in reverse.



1. Carbon brush cap

006817

Make sure that the carbon brush caps have fit into the holes in brush holders securely.



1. Hole
2. Carbon brush cap

006304

Reinstall the front cover and tighten two screws securely.
To maintain product SAFETY and RELIABILITY, repairs, any other maintenance or adjustment should be performed by Makita Authorized Service Centers, always using Makita replacement parts.

ACCESSORIES

⚠CAUTION:

- These accessories or attachments are recommended for use with your Makita tool specified in this manual. The use of any other accessories or attachments might present a risk of injury to persons. Only use accessory or attachment for its stated purpose.

If you need any assistance for more details regarding these accessories, ask your local Makita Service Center.

- Drywall screw strip
- Phillips bit
- Various type of Makita genuine batteries and chargers
- Plastic carrying case

Makita Corporation Anjo, Aichi, Japan

884724-220